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SUNDAY CLOSING AND SHORTER HOURS.

By R. W. CUTHBERT.

There is nothing that touches my sympathies more than the pleading of my brother druggist for the days of rest that are enjoyed by every other man. I know that there are some seemingly good reasons why drug stores should be open on Sundays, but I cannot see why we are required to be open on Sunday more than all night. I have been in the drug business since 1862 and in that time have worked more than a thousand Sundays. My long experience at a prescription counter convinces me that the burden is unnecessary and that some thing should be done to bring about a change.

The subject has been discussed from apparently every standpoint, yet we have seemingly made no advance. These discussions have been almost entirely among ourselves, and through our drug papers which are seldom read by the general public. We should prepare the public for what is evidently coming and have them take part in these discussions and get their expression. This we can do by discussing the subject more openly and getting at the people through our daily papers. Perhaps the public is more reasonable than we have given them credit for. If I understand the matter properly, the druggist is hesitating solely on the ground that his patrons would oppose him in his undertaking.

Until a few years ago department stores, grocers, butchers, etc., were open late at night, now all that has changed and the public seems very well satisfied and apparently for the good of others, rather prefers it to be so. There is a common impression that it is absolutely necessary for drug stores to be open on Sundays, but if the change were brought about it would be but a short time before the people would adjust themselves to the new conditions.

Until about five years ago I kept my store open all day, but kept my windows curtained, my show cases covered and endeavored to sell only medicines and articles used in the sick-room. In this way I reduced my Sunday business to a point where it was not difficult to close most of the day. The last five years I have opened on Sunday only from 9 A.M. to I P.M.—four hours. I did this without issuing any notice, but merely hung a sign on my store door on Sundays. I found very little objection among my patrons and a great many expressed their approval. I find almost all of the work we do during these four hours is among one or two dozen families, whom we term our Sunday regulars. Before the adoption of this plan my business had been for several years on a standstill, but has since constantly increased. What we lose by closing is more than made up in other ways.

Saturday's renewals have increased and I see a disposition among my customers to gather up everything they think they may need for Sunday, and many orders are even held over till Monday. This shows that people can and are willing to adjust themselves to conditions that are reasonable. Now that I have done this in the past it would be easy to shorten my hours still further, and I am sure that if a few of my neighboring druggists would follow, that the question would be solved. I would suggest that we get an expression from every retail druggist in this city on the subject and see what the general feeling is. I cannot see why one should work seven days a week if there is any way out of it.

Let us do this thing among ourselves and without legislation. Let us get together and set a time, and let the people know that at a certain time we will close our stores all day on Sundays and that it will be necessary for them to prepare themselves for it. Don't wait for legislation, don't wait till every man is converted to our way of thinking but let a few dozen, if not more, take the lead believing that others will follow. If we should call a meeting of all the men in the business to formulate a plan to bring about Sunday closing, I for one would be willing to follow a plan adopted by the majority. If the time is not ripe for all stores to be closed all day on Sundays we might by system have it arranged for one store in a half a dozen or more to be open all day, and each one in that section to take his turn, and let every man that is closed indicate by a card in his window that Mr. - is open for the filling of all prescriptions.

And now while we are studying the Sunday closing question let us do what we can to shorten our evening hours. I would suggest that we make nine o'clock the closing hour at present, and if that proves successful make it eight later on. Our long hours and Sunday work are certainly a great obstacle in the way of elevating our profession. Men are not fitting themselves with a good education to work every hour of their time outside of the time required for sleep. If this better condition were brought about we would probably find it necessary to make a rule and let the people know that all work done during the night hours would be charged for at an advanced rate and that no work would be done in answer to a bell call on Sunday by the men who were closed.

THE MENTAL NECESSITY OF AN EARLY CLOSING MOVEMENT.

BY JOSEPH W. ENGLAND, PH.G.

Some time ago, while in conversation with the famous brain surgeon, Dr. W. W. Keen, we were talking upon the subject of the most valuable things in life, and he made this statement: "Time is the most valuable asset of a man's life;" and there is a whole world of truth in this epigrammatic sentence. Time is the most valuable asset of a man's life, and there is no asset which is more ruthlessly squandered.

The truest success in life is the highest development of the individual, within, of course, his limitations. But who can tell what his limitations are? A plant grows by what it feeds upon, and the growth of the human body resembles the growth of a plant. So there is a time for mental training, and a time for moral training, and a time for physical training. It is not enough to say that all three of these qualities are brought into play in the exercise of our daily work as retail pharmacists, because this is only true to a limited extent.

It is the habit of some physicians to complain that day and night they are at the beck and call of their patients to a degree that leaves them no time of their own, and robs life of many of its dearest privileges. But if the physicians are the servants of the public, how much more so are the pharmacists who toil in their "prisons of brick and glass" every day, sixteen hours a day, without, many of them, God's sunshine and fresh air, in a daily grind with small details that wear out their lives before their time? The physician has his changes of air and scene, his variance in the duties of his profession, and, in many cases, some leisure hours that he can spend in relaxation and self-culture. But the pharmacist, as a rule, has the same dull, deadly routine to follow, day by day, month by month, and year by year, with little or no variance, and small chance, in many cases, for personal pleasure or personal development.

Why is this? Simply and solely because the pharmacist himself has so willed it. He has educated the public to expect it; and now that the public expects it, he fears to adopt "shorter hours," because all pharmacists will not adopt them also; and other pharmacists may thrive at his expense. Drug stores are so numerous and competition is so keen, in these strenuous days, that he feels he dare not take the risk, even though it would mean, to him, years of added life. But surely, if the small retail grocery stores of Philadelphia can, by common agreement, be closed almost every evening by 6 o'clock, why cannot the drug stores be closed at reasonable hours?

Believe me, there is no real necessity for such long hours in the drug business. It is a common thing for many to plead that retail drug stores should be kept open for 16 hours a day because the needs of the sick demand it. As a matter of fact, the needs of the sick require nothing of the sort. The business done after 9 P.M., for example, could just as well be done before that hour, if the public were uneducated, or rather, if the public were educated to see that the 16-hour-a-day service is fraught with serious possibilities of danger to itself by reason of the strain of the life-and-death work required. Human nature has its limitations, and the nature of pharmacists is human nature. The public condemns, and rightly, the railroad company that compels the engineers of its passenger coaches to work 16 hours a day, and if the public but knew of the long and weary watches of the day and night that the average retail pharmacist has to stand guard between the life and death of their loved ones, and the dangers to them, both of omission and commission, that result from the prolonged mental and physical strain, they would not ask for a reform; they would demand it. They

would require that every pharmacist would keep "better hours," willy nilly, and enforce that demand by appropriate legislation, if necessary.

But I have wandered from my text. I want to make a plea for "shorter hours" for the retail pharmacist from another view-point, and that is its vital necessity for the mental good of the pharmacist himself, and the profession or work for which he stands as an exponent.

It is unfortunate, in many ways, that our daily work is not wholly a trade or wholly a profession. It is both, and the professional or scientific side suffers through the combination. But it is a condition that exists, and will exist during our lives, at least, so that we will have to make the best of it.

How may the conditions of our daily work be bettered? Most probably, to the largest degree, at least, by personal development along scientific lines. We understand well the basic principles of our science and art, and we are particularly well informed, as a rule, regarding the art, or the practical operations of our calling. But we are "rusty" on the purely scientific side of our work. We have not delved deeply enough into the literature of American pharmacy. We lack sufficiently detailed information regarding the physical and chemical properties, and possibilities, of our drugs, and we lack the spirit or desire for original research work.

It is no idle boast to say that there has been more scientific work done in purely technical pharmacy in this country, during the past fifty years, than perhaps in any other nation of the world. When we think of the wonderful researches of Procter, Parrish, Maisch, Squibb, Trimble and others who have worked so zealously for the development of the sciences relating to pharmacy; when we think of the work our old Philadelphia College of Pharmacy has done during the past eighty-five years in training men for scientific work; when we think of the splendid facilities our college offers for original research-work within her walls—of her fine laboratories, of her eminent teachers, of her wonderful library of 12,000 volumes with its mines of undeveloped scientific possibilities—it should be an inspiration to every one of us to develop the best that is within us and give it to the world.

But all this is idle dreaming—" Castles in Spain"—if there be no time for thought and action, or if the body be worn out by long hours of dull and deadly routine, so that it cannot think and cannot act. There can be no progress without research, and there can be no research without time. To do work that is "worth the while" requires the proper development of the individual, physically, mentally and morally, and this takes time.

Now, how can this be brought about? The answer is easy. Simply by opening the store later in the morning and closing it earlier in the evening, and closing it every Sunday afternoon. The way to close is to close, or as Horace Greeley would say: "The way to resume specie payments is to resume." Do you realize that by opening your store at 7.30 A.M. and closing it at 8.30 P.M., you would be saving three golden working hours every day, and that this would mean over 1,000 working hours a year, or nearly eighty working days of thirteen hours each?

What possibilities could be accomplished with such time at your disposal? Not only along scientific lines, but also along the lines of broad general culture, of physical well-being, of moral duties, and the proper performance of family obligations.

The realization of such possibilities would change the entire aspect of our daily life, would make it infinitely more attractive, and would bring in its train a development that would be of untold value for our own well-being and for the public good; and it is not impossible of achievement. The reasoning, thinking public is not unreasonable. Its members simply need to be educated upon the real necessity of an "early-closing" movement—its benefit to themselves in better service—and the rest will be easy; and with public opinion behind you in such a movement, legislation would be altogether unnecessary.

SUNDAY REST AS A RELIGIOUS INSTITUTION.

BY DAVID M. STEELE.

I do not know why I have been chosen to make this one of this series of addresses to-night unless it be because of a chance remark I think I dropped in the hearing of some of you when you did me the honor last year to ask me to preach the Baccalaureate Sermon to the graduating class of the Philadelphia College of Pharmacy. I remember saying at that time that I thought, as a clergyman, I could sympathize with certain of you, as druggists, in that you had

to work so much of your time; that there was certainly no other profession in which so many men had to work so many hours of so many days in the week as they do in yours—except my own. The one thing that we have in common is that, as everyone knows, we both have to work Sundays. If there be any question which of us works the longer hours on week days, it finds answer in the fact that, while you at this moment are sitting here resting I, even at this late hour of the night, am still working—making this speech. The only thing that might still leave open the question which of us works the harder would be the possibility that I who make this speech am having an easier time than you who have to listen to it. But that question I hurry by, being afraid to put it to vote, and come to my theme itself.

About this matter of keeping Sunday, there are two things to be said at the outset. The first is that it is one of the things one does, if at all, not because he has to, but because he wants to. The second is, that Sunday as an institution is not something that exists for its own sake and to be honored as such, but something that exists to serve a purpose and is to be used as such. It is not the chief end of man to keep Sunday; it is the chief end of Sunday to serve man. If these two facts be gotten clearly in mind, much of the difficulty which hedges the subject about resolves itself, much of the discussion current regarding it is robbed of its bitterness and much of the perplexity and apprehension of so many people in regard to it is seen to be needless and groundless. May I ask you to consider these two points then for a moment each and, if it is not too confusing, to consider them in their inverse order.

Sunday, I say, is something that exists not for its own sake but for a purpose. All such statements as this come down finally to that classic statement made so long ago that "The Sabbath was made for man and not man for the Sabbath." That single statement sums up and clears up one entire half of the subject and has more meaning than any save the very, very few have ever realized. Man has been called many things, many different kinds of an animal; a social animal, a political animal, a religious animal, etc., and rightly; but he has never been called, and is never called upon to be, a Sabbath-keeping animal merely as such or merely for the Sabbath's sake. Here then stands an institution and here is man. He is of no use to it; it is of use to him. But like everything else it is

of use to him only if he uses it. Here it is: let him take it or leave it, use it or neglect it, esteem it highly or despise it. It will do him no harm if he never touches it; but it will do him no good if he does not touch it.

Furthermore, if he uses it at all, he will use it rightly, never from compulsion but only from choice. Not to see this is the mistake of so many members of the typical, average Sabbath Reform Associa-They make the mistake that every one makes who attempts to make men good by statute. There is, as a matter of fact, no such thing as "breaking the Sabbath" in the sense they speak of. Men cannot break it: they can break themselves against it; but that is a very different matter and a much more important one. If a man does not use the day then he does the day no injury; he injures only himself, and to urge him, with any profit, to use it one need never attempt to coerce or compel but may only persuade and constrain: these are two fundamental, elemental principles. The fact that you-chemists, pharmacists, druggists-are here at this moment and that you are so intent on this discussion is proof that you approve them both. You value Sunday highly and you want to use it. All I have to say is, it is too bad that you can't.

And yet that is not all I have to say; nor is it even an important part of it. Nothing would be more natural, and certainly nothing would be easier, than to stop at this point and to confine myself entirely to railing against those conditions which have robbed you of the day. I could do this all evening; but I am not going to. Neither am I going to do any of several other things that I fancy you expect me to do. There are several aspects of the subject that I am not going to speak of, and that because they are aspects and not the subject itself. It may be well, however, to pause long enough to state these merely in order to set them aside and in doing this to clear the ground for the consideration of the real and only point at issue. Of these there are three. Let me speak them merely in order to say that I am not going to speak about them.

First, I am not going to discuss the subject of church-going. It is an important subject, one worthy of consideration in itself, but it is not this subject. The unfortunate thing is that my subject as you state it-Sunday Rest as a Religious Institution-is practically never discussed apart from this. That is why the discussion so often ends in such confusion. The two subjects are not identical; at best

the second is only a phase or aspect of the first. One point is of importance in this connection, however; that is, that people do use Sunday as a day for going to church about as generally as they use any other holiday for the purpose for which it is appointed. On Sunday perhaps 10 per cent. of the population of this country, who are not compelled to work on that day, go to church. The other 90 per cent. go to Atlantic City or to Coney Island or to the country or to sleep-all of which things are about synonymous so far as using the day for its appointed purpose is concerned. But what of Decoration Day? How many of those who are released by their employers from their work on that day, and for a purpose, regard that purpose seriously? How many take any part in the decoration of dead soldiers' graves and how many spend the day entirely in doing other things? What of the Fourth of July? How many people nowadays ever foregather on that day to hear so much as the Declaration of Independence read? Or of Thanksgiving Day? What percentage of the multitude to whom this becomes a holiday make it in any sense a holy day and show forth in any formal manner any "Thanksgiving to Almighty God for the fruits of the earth and all the other blessings of His merciful Providence?" The percentage in all cases, I trow, is about the same. And the penalty will in all cases be about the same eventually, namely, the denial to people ultimately of these days as holidays for any purpose if they persistently decline to use them for their appointed purposes. But more of this anon.

The second of these three subjects that I desire to set aside as not identical with my own is the so-called "breaking" of the Sabbath by working upon it; the sin involved in working on Sunday. This also is a grave and serious subject, but it is not this subject. Here is a point against which many a reformer hurls arguments that break; they break because they fall in such confusion. For this matter is one that requires very clear thinking and the making of very fine distinctions. Everyone realizes that there are kinds of work that are wrong on Sunday—wrong because unnecessary. But everyone must also realize that there are other forms of work that are inevitable. Now the difficult thing is that, in a state of civilization which develops so rapidly as our own, these forms change and give place to each other so rapidly, and that in a civilization so complex as that of the present day a vast and ever

increasing amount of the first is constantly falling into the second class. The thinking of yesterday in this connection will not do to-day nor will the codes and catalogues of former generations serve the present one. The question in just what individual cases Sunday rest were a crime and in just what individual cases Sunday labor is a sin must be settled piecemeal and for every individual. There can be no single, sweeping, definite, dogmatic statement.

And, yet once more, there is a third thing which I conceive to be a subject apart from the theme you have set me. Besides the socalled "observance" of the day by going to church and the so-called "breaking" of the day by working upon it, there is the so-called "desecration" of the day by playing upon it. This is a subject upon which I may feel as strongly as I will, but at the same time it is one upon which I realize that I had better feel normally. The Puritan, that harsh mentor who scathed the world with his condemnation and robbed it of its cherished delights, did not strike the human average and his system has suffered accordingly. Ruskin once wrote "God forgive me those who trained me, how I hate this day!" This is one extreme form of observance and its result. As a type of the other extreme, witness last Sunday's baseball game in Chicago with its thirty-five thousand spectators. There is somewhere a normal mean between that morbidness which counts a laugh a sin on Sunday and that flippancy which counts a sin something to laugh at any day, but it is hard to find. to find because individual temperament, the personal equation and the point of view, all have importance, and the time, the place, the circumstances and the motive all must be considered in relation to each action. The solving of this problem is a task all by itself. It is a mighty task, moreover, since he who performs it must frame an entire critique of amusements as such.

Now I am sure that by this time I seem to have been talking around my subject and not upon it, and to have spent so much time making these three negative statements that there is scant space left for the positive one. But that has been precisely my purpose; for, if these points are cleared up and cleared away, the real point may be tersely put and briefly discussed, the real problem phrased in very few words and its solution set forth in fully as few. The process is like the removing of casings or hulls from a nut which, when thus bared, is easily cracked. Or, once again, to change a

simile as suddenly as to mix a metaphor atrociously, the key to the solution is then seen to be ready at hand—and to be in the hands of the clergy. Sunday rest a religious institution? It is that and it is nothing else.

It may be an accident, but it is a happy one, that my place on this programme is in the middle of this series of five speakers. The first two deal, theoretically, with rest as a physical and rest as a mental necessity; the last two, practically, with certain legal aspects of and certain business experiments with Sunday closing. Between these two pairs, the physician and the professor, the lawyer. and the proprietor, stands the priest, and says: The religious use of Sunday rest is not one of several uses; it is the only use worth while. Rest on Sunday is rest for a purpose; that purpose is rest in order to pray. It is necessary and it is permissible for men to pause in their labor to speak with their God; but it is not necessary, and they will not much longer be permitted, to take one day out of seven-a very large share-for any lesser purpose. Strange is it indeed that men so honest, so clear-headed and so far-sighted in all other things should so far fail to see this and fail so persistently. Strange is it that they do not see the anomaly in the theory and the penalty in the fact. The first is that a day of rest is asked upon one ground and is accepted on another; the second, the penalty-and it will soon be paid if this continues—will be the loss of the day upon any ground. He were a mean employer indeed who would not allow his employee to stop his work to say his prayers; but he is an equally mean employee who accepts a day of rest for worship and then spends that day at everything under the sun except worship.

Let me restate this principle. So long as the day was used, and wherever it is still used for its distinctive purpose, it has been and is still gladly given; but in other times and places it has not been and will not be. This is a perfectly natural process. Here as elsewhere cause always precedes effect. The cause is simple; the effect is obvious. This has been the history of the day's loss as a day of rest to men who labor wherever it has been lost to men who do labor. The saying of a generation ago that "There is no God west of the Missouri River" preceded and produced, so surely as a cause ever had an effect, the saying of to-day that "There is no Sunday west of the Mississippi River." Here, as in every similar field, the

case has not been a case of robbery; it has been a case of forfeit. Wherever, for any long-continued period, the day has ceased to be used as a day of worship there has come at length to be no day of rest. Let other men in other fields profit by example before they are taught by experience.

Now, if this great, main, central principle is sound the three foregoing minor ones may be studied at leisure and with profit. Having reached this point, but only then, one can turn squarely about and in reverse order retrace the line of this argument, taking up the three aspects or phases of the main problem for what they really are. He will then see them in a new light and in a new importance. Of course men ought to go to church; of course the amount of labor on Sunday should be limited within the very narrowest possible range of works of necessity; of course, among those main three things that fill men's waking hours, amusement, work and worship, amusement is as far below work in the scale as worship is above it. But all these things must be adjusted one by one.

I am sorry if I have seemed to fail of some duty in not applying this principle to the druggist especially as a member of a special class. But I have refrained from doing this on purpose. I cannot apply it for him; he must do this, as everyone must, for himself and in his own peculiar field. I have tried to treat a subject, not a phase; to frame a theorem, not a theory; to do this in entirety and not in part, and to allow this address as a unit to take its place in this symposium as a whole.

THE DEBASING INFLUENCE OF MONOTONY.

By John K. Thum, Assistant Apothecary at the German Hospital, Philadelphia.

Herbert Spencer says "Monotony, no matter of what kind, is unfavorable to life." If this be accepted as 'a truism, what could be more unfavorable and more detrimental to the proper development of a pharmacist than the monotony of seven days a week behind a drug-store counter?

Spencer also says that "A periodical cessation of daily business is requisite as a means of mental health." A sound mind in a sound body is a duty that the pharmacist owes not only to himself but also

to his customers, as it is essential to the proper performance of his duty to safeguard the public health.

Aside from these reasons, however, the pharmacist should be a law-abiding citizen and endeavor to live up to the highest ideals of true citizenship. Recognizing this fact it is unfortunate that we can readily prove that the debasing influences that the average pharmacist has been, and is, subjecting himself to would appear to be directly responsible for his ignoring one of the best-known and most thoroughly well-established laws of our State, by selling many things that are not necessary on Sunday. The so-called blue law of this State has done much to give to the people of our city and of our State a generally accepted day for rest, and it is unfortunate indeed that we, as pharmacists, should not be willing to take advantage of the law to improve ourselves morally, physically and probably financially.

At the present time pharmacists, by taking advantage of an old tradition that gives them the privilege of keeping their shops open on Sundays, sell many things that are not directly in the line of medical supplies and thus take an unfair advantage of their competitors in other lines of trade. Practices of this kind tend to lose for us the respect of other trades-people in our neighborhood and not infrequently incur for us the ill-will and enmity of neighbors who should be our friends. There is an old saying that a man must respect himself before he can expect others to respect him. If the average pharmacist enjoyed the respect and esteem of his neighbors he would not be subjected to the many petty annoyances and impositions that are practised on him at the present time.

Shorter hours and Sunday rest would give the rank and file of pharmacy more time to study, and to broaden themselves mentally, and this would give them culture, which is so necessary for the proper development of a professional man.

Shorter hours would also enable pharmacists to realize the sad condition to which the practice of pharmacy has come, not only in our city and State but throughout the whole of this great nation. Such a realization would tend to make all of us do our own thinking and not allow the editors of pharmaceutical journals, controlled by manufacturing interests or patent-medicine houses, to do it for us. What the rank and file of pharmacists of this country need, and need badly, is the ability to do their own thinking. One of the most

important steps in this direction, it seems to me, is this very question of shorter hours.

Shorter hours will allow us to get out of the monotony of our present-day existence, will allow us time to interest ourselves in what is going on about us and will, above all, permit us to enlarge on our general fund of information and to increase our field of usefulness.

When we, as pharmacists, have arrived at this stage, then, and not until then, will pharmacy, true pharmacy, professional pharmacy rise to the high and exalted position that it should occupy in this great country.

PRACTICAL EXPERIENCE WITH SUNDAY CLOSING.

The difficulties in the way of closing drug stores wholly or in part on Sunday seem more imaginary than real-while local conditions and individual preferences must largely control, yet the fact remains that those who have adopted lesser hours on Sunday universally speak in favor of the plan. Their experience is that their business has been little-if any-perceptibly lessened when the year's business has been summed up. So that they are enthusiastic to continue the practice and to urge it upon their neighbors, because they are fully convinced that its benefits are far greater than the possible loss of a few sales of merchandise.

The most plausible argument used against lessened business hours on Sunday is that that asks "what are those who are taken suddenly and seriously ill to do if their wants cannot be supplied?" matter of fact the number who are suddenly and seriously taken ill during the few hours the store would be closed are remarkably few. and in these days when nearly all physicians carry pocket cases of medicines for immediate use, this argument loses much of its force.

It is often very hard to do things we are not anxious to do-and remarkably easy to do those things we want to do-and this applies to Sunday closing with as much force as it does in other matters,

After 35 years' experience with partially closing the store on Sunday I am decidedly in favor of continuing it. The only regret I have had is that I did not increase the number of hours closed.

C. A. WEIDEMANN.

About twelve years ago we started to close on Sunday afternoon from one to six o'clock and have continuously been doing so ever since, and we know of no reason, either commercial or ethical, for changing back to the old plan. No trouble has been experienced with any of our customers, as they have always been perfectly fair in conceding that we had a perfect right to the day of rest just the same as they themselves demanded in their own right on their own behalf.

Leaving out of the question the advantages to be derived from the loyalty and earnestness stimulated in the employees of an establishment that always considers their interests as well as the purely commercial phases of a proposition in making rules for management, it is a fact that there has been no loss of business as a result.

It is very rarely that we are disturbed by the ringing of the night bell, and if this is ever done by any one without a real necessity for excuse, service is politely but firmly declined and the person invited to call during the hours set aside for business.

My opinion personally on this question in its relation to the drug business at large is that it will be decided according to the predilections and views of each individual proprietor, and after a few of those having the courage born of a conviction as to what is their just due have demonstrated the feasibility of the movement, it will come to be regarded as a matter of course and accepted as a necessity by the public generally and a large majority of pharmacists themselves.

W. L. CLIFFE.

The closing of drug stores on Sunday is a subject of vital interest. That there is an increasing sentiment in favor of a closed Sunday and shorter hours during the week is in line with genuine progress. Every druggist knows that Sunday customers and late customers are such largely through habit, and that genuine emergency cases are very rare, and, in nine cases out of ten, they occur because the drug stores are open waiting for just such trouble. The druggists of any city or town can educate the people in one month to buy their medicines and drug-store supplies on week-days and during proper hours. Were druggists to adhere more strictly to self-respecting business methods, including Sunday closing and shorter hours, they would be more respected by the people, would make fully as much money, enjoy

better health, live longer and be better citizens. Nor need it specially injure a druggist's business to close on Sunday even if his competitors keep open. By closing he and his clerks secure a needed rest and can do better work the rest of the week. By going to church his acquaintanceships are enlarged and forceful traits of character are formed which are of value to a business man. Real emergency cases belong to the doctor, and every doctor should be prepared to treat such without resorting to a drug store. The druggist who stands behind his counter fifteen hours every day in the year is either a slave or a martyr, but his sacrifice is not to science or to humanity, but is laid upon the altar of greed and mammon every time.

Joseph A. Conwell.

Vineland, N. J.

The subject of shorter hours is one which I have been interested in for some time, and I am of the opinion that no two stores can be governed by the same rules. I endeavor to have each of my assistants in the store about 11½ hours each day, and in order to do this, every alternate week two of them begin work at 7 o'clock in the morning, and continue until 9 o'clock at night; two others begin at 8 o'clock and are on duty until 10 o'clock, the closing hour. I am endeavoring to improve this by allowing the men who come at 7 o'clock quit work at 6.30 P.M., thus giving them the entire evening; and to have the other two come on at 8.30 A.M. and work until 10 o'clock.

I have tried the experiment of closing on Sundays between the hours of I and 5.30, and have frequently found on my return as many as five or six prescriptions which had been left for compounding and with notes attached, urging that they be sent at once. Inasmuch as the distance they were to be sent was in some cases considerable, such an arrangement necessarily entails considerable inconvenience. On the whole I am an advocate of shorter hours and Sunday closing, and have for years been giving the matter consideration,

THEODORE CAMPBELL.

Overbrook, Pa.

PHARMACEUTICAL MEETING.

The first of the pharmaceutical meetings of the Philadelphia College of Pharmacy, for the season of 1906-07, was held on the evening of Tuesday, October 16, 1906, as a joint meeting with the Philadelphia Branch of the American Pharmaceutical Association. One of the members present aptly paraphrased this meeting as having been helpful, hopeful and inspiring, and in doing so expressed the feelings of pretty much every retail pharmacist present. The meeting certainly was helpful in so far that the discussion which was elicited suggested ample ways and means for bringing about the objects most to be desired. The meeting was hopeful because it evidenced the well-known fact that American pharmacists are desirous of being classed as law-abiding citizens and are anxious to meet their obligations to the members of the community. Above all, however, this first pharmaceutical meeting was inspiring in that it fully demonstrated that pharmacy, in this as well as in other countries, is not devoid of votaries with force of character, willing to assert their rights, as they see them, and able to demand respect by respecting themselves.

While it is practically impossible to adequately portray the spirit that was evidenced at this meeting, some faint conception of the earnestness and ardor that were manifested in the course of the discussion may be gleaned from the following detailed report.

The meeting was called to order by Mr. Howard B. French, the president of the Philadelphia College of Pharmacy, who, after some few well chosen preliminary remarks, introduced Dr. Lawrence F. Flick, Director of the Phipps Institute, Philadelphia, who took as the direct object of his remarks, "Rest and Recreation as a Physical Necessity." Dr. Flick compared the human organism to a machine in that it possessed but limited qualities of endurance, and pointed out the need of remembering that certain mechanical, physiological, and chemical processes that are constantly going on in our bodies, and which are essential to sustain life, all consume energy.

He dwelt at some length on the necessity of keeping the human body in such a state of repair as to enable it to withstand the continuous attack of pathogenic micro-organisms and of other diseaseproducing factors. A machine is destroyed in proportion to the way it is used or abused, and the human organism may, in the same way, be destroyed or its usefulness impaired by driving it beyond the natural endurance of the individual organism.

He further pointed out that athletes frequently die young because of overaction of certain of the muscles of the body, particularly of the heart. This overaction may lead to the degeneration of the muscular tissue and thus predispose these tissues to the attack of certain disease-producing factors. Rest, of the proper amount and kind, is essential to maintain the muscular tissues in their proper tone so as to facilitate the resistance to the invasion of micro-organisms of disease and to carry us on to healthful old age.

Rest is also of importance to our physical well-being, and we should always remember that with advancing years the body requires an ever-increasing amount of rest.

Dr. Flick also asserted that recreation, properly used, was in a sense synonymous with rest. The constant use of energy along narrowly defined lines is a great disadvantage, and recreation by consuming energy along lines quite different from those usually followed produces a sense of rest and well-being that cannot always be attained even by absolute rest. The human organism, therefore, not alone requires daily physical rest but also demands recreation or rest of another kind. It has well been said that a hobby is necessary to man as a source of pleasure, it is necessary as a means for recreation and is absolutely necessary as a source of pleasure and diversion in old age.

The Chairman then introduced the Reverend David M. Steele, Rector of the Church of St. Luke and the Epiphany, of Philadelphia, who spoke of "Sunday Rest as a Religious Institution" (see page 508). He pointed out that while man has been variously classed as an animal he could not properly be classed as a Sabbath-keeping animal.

The Sabbath was made for man, not man for the Sabbath. The Sabbath is of use to man, providing he uses it rightly. The proper observance of the Sabbath is largely dependent on the point of view of the individual, but should never be confounded with any of the many co-related subjects that are not themselves directly involved.

Thus he pointed out that church-going is a subject by itself and has nothing to do with the proper observance of the Sabbath.

Breaking the Sabbath by working on it, has nothing to do with and has absolutely no bearing on, the institution of the Sabbath itself. Desecrating the Sabbath by playing on it, or by using it as a day of recreation, is a problem that is only of importance in that it brings up the question of whether it is right or wrong on any other day. Any rest that we may expect to have on this the appointed day of rest is largely dependent on how we interpret the need for play, work, prayer, or of pleasure, labor, communion.

In conclusion he pointed out that the loss of Sunday as a day for rest, in many instances at least, is largely due to the misuse of the day by workmen.

The next speaker, Mr. Joseph W. England, of Philadelphia, discussed "The Mental Necessity of an Early Closing Movement" (see page 505). He asserted that time is the most valuable asset in a man's life, and judiciously expended provides for mental training, moral training and physical training. The pharmacist has educated the public to expect that he keep his shop open during unduly long hours, and now there is an evident need for him to educate the public into realizing that these hours are not alone harmful to the pharmacist but are actually a menace to the best interests of the public itself. Shorter hours are essentially necessary to the pharmacist to permit of his mental development in the lines followed by him in his daily work. It must be self-evident that if there be no time for thought and study there can be no advancement, consequently no development of the science of pharmacy.

The open discussion that followed the presentation of these communications consisted largely of personal observations, or, "Practical Experiences with Sunday Closing," as announced on the programme. This portion of the discussion was taken part in by a number of the members present and elicited considerable difference of opinion, as to who was to be blamed and how the desired object could best be brought about; practically all of the members present agreeing that shorter hours and at least a partial day of rest were highly desirable.

This portion of the discussion was opened by Dr. Clement B. Lowe, who said, in part, that while he was fully in sympathy with the frequently expressed desire to curtail the hours of work he thought it would be practically impossible in many locations. Dr. Lowe then recounted some of his own experiences with Sunday closing and ventured the opinion that abstaining from unnecessary work was the best that could be done at the present time.

Mr. French, the Chairman, in commenting on the remarks by Dr. Lowe said: "The Chair congratulates Dr. Lowe upon the large amount of business which he is doing on Sunday, but would suggest that he follow the precedent established by some of the barber shops in Philadelphia, and display a sign stating 'Extra Help,' and thus get through with the business in the morning and close his store Sunday afternoon; that in the opinion of the Chair, pharmacists only needed a little more 'back-bone' and independence so as to act independently of what their neighboring competitors do!"

The hour being late the Chairman asked Prof. Joseph P. Remington to preside as he was obliged to catch a train.

Professor Remington, in taking the chair, ventured the opinion that Sunday closing was not alone a possibility, it was a need, an absolute necessity. He further noted the fact that he had before him a number of ardent advocates of rest and recreation and said that he felt confident that they had much to say in favor of their particular hobby.

Mr. Thomas H. Potts, a member of the Executive Committee of the N.A.R.D., asserted that the demand for shorter hours was a reasonable one, but no longer a local issue, it had become a national issue and was sure to be crowned with success. He himself, he said, had closed on Sunday afternoons, for a number of years, and during the coming winter he proposed to close his store at an earlier hour in the evening.

Mr. Stein, of Reading, said he had closed his store on Sunday afternoons for many years, and felt sure that he had not lost anything in the legitimate line of Sunday business.

Professor Kraemer read a paper that had been contributed by one of the veteran pharmacists of Philadelphia, Mr. R. W. Cuthbert, who thoroughly sympathizes with the plea of the retail pharmacist for shorter hours and Sunday rest (see page 503).

Mr. Wilbert called attention to a number of letters that he had received, bearing on the same subject, and asked permission to read abstracts from at least several of them.

A letter from Mr. E. D. Cook, of Trenton, brought with it greetings from Mr. J. G. Bone, of Scranton, who, for many years, has been actively interested in furthering the Sunday-closing agitation.

Mr. Cook on his own behalf also contributed a number of observations and suggestions, in part, as follows:

I hold that the proprietor and his clerks are as much entitled to the Seventh Day rest as any other body of men and there can be no demonstration to prove that they are different beings either in the peculiar character of their mentality, in their moral make-up, or in the physical constitution of their bodies. I believe that it is possible to conduct our business successfully by limiting the duties on Sunday to works of necessity or mercy and abridging the hours of labor so as to give both the proprietor and clerk ample time for rest and attendance at a house of worship if they so elect.

Two questions will no doubt arise in the minds of those who are somewhat sceptical of the "Sunday-Rest Movement" and the first one might be this: If the Sunday-rest movement is such an excellent one why has it not been adopted long ago?

The query seems almost superfluous, but may be answered by saying :

- (1) That we do not know how to start,
- (2) That we have a natural fear that our business may slip away from us; and no man wants to fast.
 - (3) We are too much used to the old way.
- (4) We ourselves are unwilling to start unless our competitor will do the same.
- (5) Some of us at least fight Sunday closing from pure mercenary reasons. This is especially true of druggists who have a large Sunday soda and cigar trade and more particularly of men whose income is increased upon that day because his neighbor refuses to sell such commodities on Sunday.

The second question that might be asked is "Would the proprietors and clerks welcome such an abridgment of their labors?"

Three years ago Mr. J. G. Bone, of Scranton, introduced a resolution, at the annual convention of the N.A.R.D. at St. Louis, that was unanimously accepted; the following year it was again reaffirmed and this year the same welcome victory was accorded it upon its re-presentation.

Would the druggists welcome Sunday rest? Surely yes.

Another letter bearing on the same subject was received from Mr. J. H. Redsecker, Lebanon, Pa., who, in sending his regrets, said, in part:

We have long since taken up the question of shorter hours, in a practical way, and close our store at 9 o'clock. I should, however, be willing to do as other merchants in our town do, close our store every evening at 6 o'clock, except Monday and Saturday evenings. With a view of learning whether or not it was profitable to keep open even this late every evening (9 o'clock), we made a series of observations several years ago, and found that on nights when other business places were closed the increase in business in our store, between the hours of 6 and 9, was only about 7 per cent. on the day's sales, while on Monday and Saturday evenings, when the other stores in town were open until 9 o'clock, the increase was very much larger; some 40 per cent. of the day's sales.

Sunday closing has also been adjusted. We have adopted hours of our own. From 9 to 10.30, from 12 to 1.30, and from 5 to 7 in the evening with one

clerk on only, so that each gets these hours every three weeks. We keep a strict account of our sales and the profits go to charity and to religious work, so that we always have a charity fund to draw on for such purposes.

Mr. Wilbert, in commenting on this letter, said that Mr. Redsecker, in his characteristic, practical way, has evidently solved the shorter-hour problem, at least sufficiently well to demonstrate that if others should accept his findings, or would repeat his observations, they would agree with him that it would pay them to follow the hours for closing adopted by other business men in their neighborhood or town. Mr. Redsecker's disposition of the profits from his Sunday sales appears to be a commendable one, and if generally followed would go far to solve the question of Sunday closing.

Mr. Wilbert then called attention to a characteristic communication which he had received from Prof. C. S. N. Hallberg, of Chicago. This was particularly interesting as illustrating how widespread the present agitation for Sunday rest really is. The communication was in part as follows:

SUNDAY-REST AGITATION ABROAD.

As an illustration of the widespread recognition that is being accorded to the evident need for rest and recreation, by the human organism, it may be interesting to call attention to several phases of the agitation and the results so far attained.

In France the recently enacted "Sunday-Rest Law" came into force on September 2d of this year. From the available newspaper reports it would appear that the several provisions of the law are being generally complied with. This general compliance with the really radical innovation of compulsory rest, is somewhat surprising when we remember the nature, tendencies and temperaments of the people themselves. The French people while they are known to be temperate and industrious are also known to be extremely frugal. Their frugality frequently borders on, if it does not closely simulate, avarice and has undoubtedly been the direct cause of the widespread habit of working seven days in the week.

The French Sunday-rest law is the direct result of a movement inaugurated several years ago and is based on the assumption that a day of rest and recreation is essential to the proper conservation of the health of individual members of the community. Sunday was chosen as the most convenient day of rest, not because of religious influences but because a fair proportion of the members of the community were already accustomed to shut their shops and offices and devote that day to other than business purposes.

The law provides that neither workman nor employer in any establishment, either public or private, religious or secular, professional or benevolent, work more than six days in the week, and that the seventh day shall be a day of rest of not less than twenty-four consecutive hours. The second provision declares

that this rest shall be taken on Sundays, except in cases where simultaneous suspension of work by all the employees of an establishment shall be deemed prejudicial to the public or injurious to the best interests of the proprietor. In such cases the employees are allowed to take their rest in turn on other days, but no employee shall be required to work more than sixty hours in each week.

Although druggists, with a number of other individuals engaged in industries the interruption of which would be an inconvenience to the public or cause waste or loss of material, are included in the exceptions from Sunday observance, there appears to be a general feeling among the pharmacists of the larger cities and towns that Sunday observance should be arranged for.

Even in Germany there has been considerable agitation in favor of Sunday rest on the part of apothecaries, and in some of the cities permission has been granted by the Government authorities to close all but one of the local pharmacies in a certain district.

This latter is the method that has been adopted in Switzerland, where pharmacists appear to be much further advanced and better organized than in Germany.

Mr. Theodore Campbell, of Overbrook, related some vexatious experiences that he had encountered by attempting to close his store on Sunday afternoon, and ventured the opinion that it would be practically impossible for him to close on Sunday. He did, however, believe that the hours of work could be curtailed and expected to try it during the coming winter.

Mr. M. M. Osborne, of Elkins Park, a suburb of Philadelphia, said that for years he had closed his store at 8 P.M. during the week, and at 8.30 P.M. on Saturday evenings. His Sunday hours are from 9 to 11 A.M. and from 6 to 7 P.M. He said that he had never found it necessary to bow down to a person who might spend money in his store. What the average pharmacist needs is self-respect; if he cultivates this he will find that he will gain rather than lose by asserting himself in his rights.

The way to close is to close. If pharmacists themselves do not appreciate the need for shorter hours the question will be taken up by the clerks and proprietors will virtually be compelled to accede to their request.

Dr. Mutchler, the Secretary of the Sabbath Rest Association of Philadelphia, being requested to express his opinion on the subject, asserted that druggists can secure Sunday rest if they wish it. He believed the members were taking the matter up in the proper spirit and expressed his gratification at having had the privilege of being present at this meeting.

Mr. Christopher Koch said that he thought it impracticable to close on Sunday. Such a practice would engender the animosity of physicians and cause an increase in self-dispensing. He expressed the belief that the only rational solution of the question was by legislation. Compel all stores to close.

Mr. Clarence H. Campbell thought education preferable to legislation and recounted his experience with his physicians and customers. By securing their co-operation and explaining to them the need for closing on Sunday he believed his week-day business had actually been increased materially.

Mr. J. K. Thum asserted that it is well known that monotony is unfavorable to the higher forms of life. Unless the pharmacist respects himself he is sure to lose the respect of his customers (see page 514).

Mr. Harbold said that the druggist has lost the respect of the public because he stoops to the level of the menial. As the apothecary at one of the large local hospitals he could not see why druggists could not close earlier in the evening as well as close their shops for the greater portion of Sunday afternoons.

Mr. Hugh Campbell said that he had been brought up in a store where Sunday closing had been observed and had always observed it himself. He did not believe that he had lost either trade or friends and certainly felt that he had gained respect.

Prof. I. V. S. Stanislaus said that he could but reiterate what had been said before: "Unless the pharmacist learns to respect himself he cannot exact the respect of his customers."

Mr. A. J. Staudt called attention to the present widespread need for competent help in pharmacy and expressed the opinion that shorter hours would prove doubly helpful in that it would increase the hours for rest of the proprietor and attract better and more competent people to take up the practice of pharmacy.

Professor Kraemer moved that a joint committee of three members each be appointed by the Philadelphia College of Pharmacy, the Philadelphia Branch of the American Pharmaceutical Association and the Philadelphia Association of Retail Druggists to further consider the question of "Shorter Hours and a Day for Rest" and to report at a future meeting.

Mr. Potts moved that a vote of thanks be accorded to Dr. Lawrence F. Flick and the Rev. David M. Steele for their interesting communications. These motions were unanimously adopted. The chair then announced as the committee of the Philadelphia College of Pharmacy on "Shorter Hours and a Day for Rest," Mr. R. W. Cuthbert, Mr. J. C. Peacock and Mr. Theodore Campbell. The committee appointed for the Philadelphia Branch of the American Pharmaceutical Association is: Wm. L. Cliffe, Mrs. Bertha De G. Peacock and Franklin M. Apple. The committee for the P. A. R. D. will be appointed at the next stated meeting of that organization.

M. I. WILBERT, Secretary of Conjoint Meeting.

TINCTURE OF NUX VOMICA, U. S. P., 19001

BY JOSEPH W. ENGLAND.

Under the title of Nux Vomica, or Vomica Nut, the seeds of Strychnos nux vomica, W. I., 1052, were officially mentioned by the U. S. Pharmacopæia of 1820, but the tincture of nux vomica was not recognized until the issue of 1850, when a formula was given for its preparation from the rasped seeds by maceration with alcohol in the cold, for fourteen days, expression and filtration; or, maceration for two days, transferal to a percolator, and percolation with alcohol, until the requisite quantity of clear liquid was obtained. The strength was eight ounces of drug to two pints of alcohol.

In the U. S. P. of 1860 and of 1870 the seeds were directed to be used in "a fine powder," and this was digested with one-half the quantity of alcohol, at a gentle heat, transferred to a percolator, and percolated with sufficient alcohol to make the required amount. The strength was eight troy ounces of the drug to two pints of alcohol.

In the U. S. P. of 1880 a more complicated formula was adopted. The seeds in a No. 60 powder were macerated, and then percolated with a menstruum of alcohol 8 parts and water 1 part. The first 90 parts of percolate were reserved, and the remainder of the percolate evaporated to 10 parts, and mixed with the reserved portion. Then the percentage of anhydrous extractive was determined in a small quantity of the mixed percolates, and the finished product

¹ Presented to the Scientific Section, American Pharmaceutical Association, September 7, 1906.

adjusted, by the addition of menstruum, to represent 2 per cent. of anhydrous extract,

In the U. S. P. of 1890, the tincture was directed to be made by dissolving 20 grammes of an anhydrous extract of nux vomica containing 15 per cent. of alkaloids, in a sufficient quantity of a mixture of three volumes of alcohol and one volume of water to make 1000 c.c. Each 100 c.c. contained 0.3 gramme of total alkaloids. It was assumed that the strychnine and brucine were present in the total alkaloids in about equal proportion, which would indicate that each 100 c.c. of tincture represented 0.15 gramme of strychnine. As a matter of fact, this assumption was in error, the percentage of strychnine in the total or mixed alkaloids being from one-third to one-half.

In the U. S. P. of 1900 (8th Revision), 20 grammes of a standardized extract of nux vomica containing 5 per cent. of strychnine is directed to be dissolved in a sufficient mixture of three volumes of alcohol and one volume of water to make 1000 c.c. Each 100 c.c. contains 0-1 gramme of strychnine, which, apparently, is a reduction in the strength from the former revision of about 20 per cent.

It is to be regretted that the present issue of the U.S. Pharmacopæia saw fit to continue, practically, the formula of the previous revision, although an attempt has been made to secure a more definite product by using an extract standardized to contain five per cent. of strychnine. This extract, which is in a powdered form, is expensive and tedious to make, readily solidifies (which is due to the sugar of milk present), and when mixed with the official menstruum, it does not form a clear solution, but deposits more or less insoluble matter (apart from the sugar of milk), and on filtration yields a tincture that becomes turbid in time, and precipitates by The writer has examined a large number of the powdered extracts of nux vomica, made by the official process, by leading manufacturers, and in every instance there has been an odor suggestive of caramelization from overheating, and more or less insoluble matter has been left in using them to make the official tincture. Samples of the powdered extracts are submitted together with samples of the tinctures made from them, both before and after filtration. The differences between them, in physical properties, are very apparent.

It has been claimed that strychnine is the only principle of medicinal value in tincture of nux vomica. The writer is not prepared to accept this statement. If true, it means that a solution of strychnine in alcohol and water should yield all the therapeutic results of a tincture made from the drug, and yet we know that the tincture, for some reason or other, is preferred by many physicians, in certain clinical conditions, particularly where the gastro-intestinal tract is involved. This may be due, possibly, to the presence of extractive matter which retards the solution of the strychnine of the extract, in part, or in whole, in the stomach, and enables the strychnine to exercise a local influence (by absorption) as it passes over the mucous surfaces of the intestinal tract. But, be this as it may, the tincture is undoubtedly preferred to the alkaloid by many physicians, in certain clinical conditions, and there must be a reason for it.

Hence, the writer would suggest that tincture of nux vomica be made, not from a standardized powdered extract, which must of necessity yield a product of more or less doubtful therapeutic value, but from an assayed powdered fat-free nux vomica (No. 20 powder), and then standardized to the strength of the official tincture.

The official tinctures of opium and of cinchona are both made from assayed drugs, and the only reason probably that tincture of nux vomica has not been, is because it contains fat, which renders the exhaustion of the drug difficult. But, if the fat be removed with clean petroleum benzin, and dried, this difficulty disappears. The benzin-treatment removes a small quantity of strychnine from the drug, but as the final product is assayed and standardized to contain a definite percentage of strychnine, this loss is of no practical importance.

The last four analyses of powdered nux vomica (not fat free) we have made this year, ran in strychnine content as follows: 1.4, 1.27, 1.25, 1.1 per cent., or an average of 1.25 per cent.

A sample of the tincture made from the assayed fat-free drug and standardized to contain 0.1 gramme of strychnine in 100 c.c., is here submitted.

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EDUCATION AND LEGISLATION IN PHARMACY.1

By OSCAR OLDBERG.

Our Pharmacy Laws.—Lord Chancellor Coke of England said that "Law is the perfection of reason." But Lord Coke lived at the end of the sixteenth and the beginning of the seventeenth century. He had never seen our American pharmacy laws which are products of the nineteenth and twentieth centuries. We have made great progress in the past one or two centuries and our laws are now beyond reason.

I can not impose upon your time and patience by presenting here all of the remarkable deviations from the "perfection of reason" which characterize our pharmacy laws; but in order to show you the rate of progress we are making and how much more advanced our most recent laws are than the older enactments I shall quote a few words from the laws passed this year in the District of Columbia and in Iowa. The Act of Congress approved May 7, 1906, provides that applicants for license in the District of Columbia "shall have had at least four years' experience in the practice of pharmacy or shall have served three years under the instruction of a regular licensed pharmacist, and any applicant who has been graduated from a school or college of pharmacy recognized by said Board as in good standing shall be entitled to examination upon presentation of his diploma." "The bearing o' them observations lays in the application on 'em." Not being endowed with the legal acumen of Lord Chancellor Coke or of our own esteemed Professor James H. Beal I was unable to unravel the inner meaning of that law, so I wrote to the Board of Supervisors in Medicine and Pharmacy of the District of Columbia asking for an official interpretation. The answer I received was that all applicants for license to practice pharmacy in the District must prove that they have had four years' experience, but no light was shed upon the reference to graduates. I then wrote again asking why graduates were mentioned at all since graduation is not compulsory and graduates are not exempt from examination nor given credit in any form for their technical education. The Secretary, in reply, promised to lay this conundrum before the

¹ Portion of chairman's address on Pharmacy Laws and Boards of Pharmacy, presented to the Section on Education and Legislation of the American Pharmaceutical Association, September, 1906.

Board and I may yet be informed of the hidden significance of the lines referring to graduates.

I wish to call your attention to the fact that Congress took the enforcement of the pharmacy law out of the hands of the Board of Pharmacy in the District of Columbia and placed it in the hands of the medical men, reducing the Board of Pharmacy to a committee of examiners in pharmacy without any other functions. Is not that fact a significant straw? If the execution of the pharmacy law is transferred to medical men at the capital, how long will it be before this precedent is followed in the States? Not long, indeed, if the present neglect of reasonably respectable educational requirements continues.

In Iowa the new law which is to take effect October 1, 1906, provides that graduates of reputable schools of pharmacy shall be eligible to take the examination and be licensed without any experience whatever in drug stores. Just think of it!

THE BOARDS OF PHARMACY have a hard time of it. With such absurd, vague, contradictory, stupid laws as we have, they find it difficult to remedy the grossest evils. The rights of the people are heartily supported by self-respecting professional pharmacists who favor respectable educational standards. The purely commercial druggist blindly opposes better education because he imagines that educational requirements must hit his pocket-book, and does not care about his obligations to the public.

Politicians and grafters want to use the pharmacy laws for other ends.

Members of the Boards of Pharmacy should be experienced druggists who have been in business on their own account for at least five if not ten years, conducting pharmacies in which the prescription department is a large part of the whole establishment. Every Board member should possess all the educational qualifications which may be reasonably exacted of all licentiates. They should have a general education equivalent to that signified by high-school graduation. Hereafter, since graduation in pharmacy is now a requirement for license in two States, they should also be graduates of good pharmaceutical schools. Not all good practical pharmacists are fit to be Board members. Not all graduates are fit. But men who are both experienced and well educated are the kind that should be selected if they are at the same time matured, broad-

minded, public-spirited men who take a pride in their profession and who will conscientiously study their duties and perform them faithfully without fear or favor.

It affords me great satisfaction to be able to believe that a great majority of the members of the Boards of Pharmacy are competent, broad-minded, public-spirited, conscientious men. But they are not all of that stamp. In our day Tom, Dick, and Harry are unafraid to undertake anything and everything without the slightest special fitness or preparation and other people are generally too timid or too fond of their own comfort and peace of mind to speak out against flagrant abuses. I must confess that I am far from pleased to condemn our system, but I cannot afford to do otherwise.

Plain common sense would admonish us that no man should undertake to be a teacher who has never been a real student himself. No man should accept the post of examiner and then hold examinations which he himself can not pass. No man should accept any public office the duties of which he is unable or unwilling to master. Yet we do have some members of Boards of Pharmacy who are unfitted for their posts.

The great majority of pharmacists, including the Board members themselves, have probably never fully realized the importance of the Boards of Pharmacy and the real dignity and magnitude of their functions when properly understood and fully performed. The duties of Board members are not light unless performed in a merely perfunctory way.

THE POWERS OF BOARDS OF PHARMACY are as a general rule most ample. It would be perfectly safe for the Boards to do all that can reasonably be expected of them to exact higher educational standards.

There are usually two extremes possible in any course of action. In the enforcement of the pharmacy laws one extreme is to place the standards of qualifications for license too high so that the pharmacists can not comply with them without paying a price altogether out of proportion to the value received; the other extreme consists in making the educational requirements for license so low that the public receives nothing in return for the exclusive privileges it gives the pharmacist. Between these extremes lies a navigable channel called reasonableness.

The Board of Pharmacy is the umpire which must see to it that

there is fair play. It must do justice to both the public and the pharmacist. There are those who already question the wisdom of turning over the regulation of the practice of pharmacy to the pharmacists themselves. Therefore let the Board of Pharmacy not forget the rights of the public.

The only limit to the power of the Boards of Pharmacy to fix or define the qualifications of applicants for license is the limit of reasonableness. The pharmacy law of Minnesota says nothing about the general preliminary education which should be required of applicants for license. The Board asked the Attorney General of the State whether it had the power to prescribe whatever standard it deemed requisite, grammar-school graduation or high-school graduation. He replied that the Board has wide discretionary powers and can do whatever is reasonable.

The fact is that in most of our States, as the laws now read, the Board of Pharmacy is the sole judge of the qualifications which should be exacted of all persons to whom licenses are issued. The Board has ample power to demand not only one year's high-school work but four years of it if it so decides. It has also the right to demand graduation from a proper school of pharmacy. It has the right to decide what constitutes a proper school of pharmacy. It has the power to examine into the qualifications of any candidate whether by taking stock of what that candidate has done and the examinations he has already passed before any examiners whose ability and honesty are entitled to confidence, or by examinations held by its own members, or by examinations held by examiners of its own selection. It has the power, in its own discretion, to exempt from all examinations graduates who have successfully completed sufficient courses of education in proper pharmaceutical schools; or to exempt such graduates from examination in chemistry, botany, pharmacognosy, materia medica, the theory of pharmacy and any other scientific study adequately covered by their college courses, giving such graduates instead an examination limited to the practical pharmacy of prescriptions and dispensing.

The kind of men who should by all means be members of the Board of Pharmacy must make the very best examiners to test the ability of applicants for license to read and understand prescriptions, to detect errors and dangers in these, to compute doses, and to do the actual work of dispensing in a workmanlike way. I am unable to comprehend why they should insist upon doing more.

The Board of Pharmacy is part and parcel of the State government. It has the power of the State at its back in the enforcement of the law and of all reasonable rules necessary to its proper Like other government commissions the Boards of enforcement. Pharmacy not only can but must learn all important facts having a direct bearing upon their functions. They should invite the opinions and advice of men whose opinions and advice may be of value. They should invite all persons and institutions directly interested to come before them and be heard, and should hear them attentively.

THE REQUIREMENTS FOR LICENSE should be:

- (1) proper age or maturity and responsibility;
- (2) sufficient mental efficiency attained by proper preliminary general education;
- (3) sufficient technical and professional education in a pharmaceutical school; and
- (4) sufficient practical pharmaceutical experience or training under proper conditions in pharmacies where really pharmaceutical work is done, including the dispensing of prescriptions.

Satisfactory fulfilment of each of these requirements should be exacted by the Board of Pharmacy which should investigate for itself and demand such evidence as it may deem necessary,

No person should be licensed to learn or practice pharmacy who has not had one or two years of high-school education. No person should be licensed to practice pharmacy either as a principal or as a clerk who has not had sufficient drug-store experience of the right kind. No person should be licensed to open, conduct or manage a drug store unless he has had at least three years' drug-store experience, has served at least one year as a registered assistant, and has graduated from a good school of pharmacy.

It is evident that to the Board of Pharmacy graduation from a school of pharmacy should mean nothing more and nothing less than the successful completion of a sufficient quantity of educational work of the right sort. The educational development and efficiency of the graduate is the thing wanted, and that depends upon the quantity and quality of the education. The title or degree of the graduate has no definite meaning, whether it be that of pharmaceutical chemist, graduate in pharmacy, or bachelor, master or doctor. The work at the school is all that counts to the credit of the graduate. The Board should therefore inquire what he did, how much

he did, and how much time was taken to do it, and how well it was done.

The time of college attendance is in twenty-one States deducted from the drug-store experience required for license. In many of these States the actual number of weeks spent at a college of phar macy are counted, whether two, or twenty, or thirty-six, without reference to whether the student loafed or studied, succeeded or failed, finished the work he had undertaken or left it unfinished. Students who fail utterly at college apparently get as much credit as those who stand high. Clearly no credit whatever should be given for killing time, or for unfinished or unsuccessful school work.

THE BOARD EXAMINATIONS, judging from the questions used, are in some States very good; in other States very bad. Some examiners seem to think that they must test the qualifications of the candidates as useful commercial salesmen and general clerks instead of testing their efficiency in legitimate pharmaceutical professional work, which is all that the law requires or permits.

The methods and scope of the Board examinations in different States and the kind of questions asked in them, vary extremely. They often seem to be devoid of any plan. One examination sometimes differs from another in the same State in a most remarkable manner.

No information seems to be accessible concerning the nature and scope of these examinations. The candidates cannot know how to prepare themselves. This is unfortunate. Every citizen is entitled to know upon what terms he can secure the right to engage in any lawful occupation.

The disorderly fashion in which candidates for license in pharmacy are struggling to get past the Board might be made orderly.

There can be no sufficient excuse for the enormous proportion of failures in the Board examinations. If the examinations are right then the laws and rules which admit so many unfit candidates to take those examinations must be wrong. In one examination there were sixty candidates and every one failed; in another one hundred and eleven candidates, of whom ninety-eight failed. Such results conclusively prove that we have no sane system. These failures occurred in States where the Board examinations are among the best.

The candidates who failed must all have had several years drug-

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store experience or they could not, under the laws of those States, have been admitted to the examinations. Evidently, then, those who insist that drug-store experience is all that is necessary to the proper training of pharmacists are quite mistaken. The drug stores do not teach chemistry, materia medica and pharmacy. All Boards of Pharmacy examine all candidates for license upon those subjects, If the Board examinations are not to include those subjects, then what should they include? If it is proper that these subjects should be included, then let us all know how much of each, how the candidates can best master what they are required to know, and what the schools should do to satisfy these requirements.

Without any definite plan the Boards do not agree with each other, the courses in one school do not agree with those of another school, and it is impossible for the Boards to make their examinations fit the college courses or for the colleges to make their courses fit the Board examinations, or for the bewildered candidates to know what to do to be saved.

PRELIMINARY EDUCATION.—But the most serious evil of all is the inadequate preliminary general education of the apprentices in the drug stores and the students in the colleges of pharmacy. In the absence of any fixed standards the employer is the judge of the educational fitness of the young men who are to be our successors. He settles the question effectually both for the Boards and the Look at the insignificant numbers of the classes that attend schools with proper educational entrance requirements, and the many times as large classes that attend the schools with low admission requirements.

All schools of pharmacy must draw their students from the drug stores.

All schools who uphold high standards would certainly be obliged to close their doors for want of sufficient classes were it not for their endowments, bequests, appropriations, rent-free quarters, and other unusual helps. They need sorely all the encouragement they can possibly get. Shall they be denied that encouragement? Do we want the schools closed? Shall we not rather follow the universal example, heed the universal lesson, and encourage education?

Are we honest to our calling, honest to the public, honest to the young men who would succeed us, when we allow young men to become students and apprentices whose preliminary education is so wretchedly poor that their career is almost certainly foredoomed to failure? No. Let us repent and reform.

We are told that a large number of graduates coming from practically all the schools of pharmacy are unable to pass the Board examinations. The Boards blame the schools and the schools blame the Boards. Perhaps they are both to blame. Let them get together and find out what the trouble is.

This great Association should be the neutral ground where the Boards and schools can be brought into friendly and proper relations. They can each teach the other some valuable lessons.

And, above all, let us now and here begin to construct an orderly, sane, respectable, workable system of dealing with the regulation of the practice of pharmacy, the promotion of decent pharmaceutical education, the preservation of the professional honor of our craft, and the prosperity of all of our worthy craftsmen.

REASONABLENESS.—No laws are ideal. They are made up of conventions and compromises. This is not only proper but unavoidable.

The pharmacy laws and the rules of the Boards must all be compromises. But several grades of compromises are possible.

The standards we should set up for ourselves as entirely practicable and attainable within ten or twenty years must include highschool graduation and a solid two years' course in a good school of pharmacy.

The irreducible minimum requirements which may very well be put into practice at once are one year's high-school work and a college course of fifty-two weeks divided between two years.

The best plan would, therefore, seem to be one that recognizes these limitations, but which is elastic enough to encourage the higher standards while permitting the lower ones.

High-school graduates should be enabled to complete all qualifications for license as Registered Pharmacists in five years after their graduation from high school, and that period of five years should for the present include either three years of drug-store experience and two years in a pharmaceutical school, or four years' drug-store experience and one year in a school of pharmacy, at their option.

A young man who graduates from high school at eighteen could thus become a Registered Pharmacist at twenty-three.

A young man of seventeen with one year's high-school work to his credit should be enabled to become a Registered Pharmacist in eight years; one with two years' high-school work should be allowed to qualify in seven years; and one having three years' highschool work to his credit should become a Registered Pharmacist in six years.

This graded system would encourage, or at least would not discourage, better education. It would give us more intelligent apprentices and clerks. It would reduce the period of service in drug stores by one year for every additional year of education beyond the irreducible minimum of one year's high-school work. It would require the clerks to serve long enough to become sufficiently matured before they can become principals in charge of stores. It would enable apprentices and clerks to put in two years at a good pharmaceutical school without being punished for it by being made to wait that much longer for their license. It would render it practicable to insist that no one should be licensed as a Registered Pharmacist until after he shall have served at least one year as an assistant. It would enable us to require that no person should be licensed as an assistant pharmacist and thereby authorized to dispense prescriptions and do all kinds of pharmaceutical work unless that person has reached the age of legal responsibility. It would enable owners and principals of drug stores to leave their stores temporarily in the hands of trusted clerks who are licensed assistant pharmacists without violating the law. It would enable hard-worked druggists (whose business does not permit them to specially employ a Registered Pharmacist to take charge during their temporary absence) to attend the annual meeting of the American Pharmaceutical Association or take a reasonable vacation each year instead of making slaves of themselves, thereby greatly reducing their capacity for efficient service to the public.

Let us not have any more beginners in pharmacy whom we would be ashamed to own as our worthy successors. Let us not have any more drug clerks who must be watched by their employer at every turn, or do their work by stealth. I have said elsewhere, let us make the apprentices self-respecting and more contented with their lot by giving them to understand that they are not mere bottle washers though they must wash bottles. Let assistant pharmacists know that they are not non-entities but trained practical dispensers

authorized by law to do all kinds of legitimate pharmaceutical work without having their employers looking over their shoulder at all times. Let the clerks know that the only thing a qualified and licensed assistant cannot do in the line of pharmaceutical practice is to run a drug store on his own responsibility, and that the right to do that will come only when he shall have become a Registered Pharmacist.

It is in my humble opinion a grave mistake to ignore the fact that there is and always will be a sufficient difference between the principal and the clerk, and between their respective responsibilities. Both should be recognized by our laws, and higher qualifications should be required for more important duties and responsibilities.

There are those who believe, or profess to believe, that there is no good reason why the principal of a pharmacy should be required to measure up to a higher standard of efficiency than the clerk. It is especially denied that any better protection is afforded the public by a higher standard of education for the principal or manager of the drug store if his licensed assistant should be permitted to perform the usual duties of the dispenser during the temporary absence of the principal in case that temporary absence is extended over several weeks, but it may not have occurred to these objectors that the principal of any pharmacy is the man who controls all the supplies and is responsible for the identity and quality of all the medicinal materials in the shop. He furnishes not only the materials but the tools and other facilities necessary for carrying on the work. The principal is legally answerable for the management of the pharmacy which must be so conducted that the public is properly served and its welfare safeguarded, but the clerk or assistant is responsible only for his own individual services. The clerk dispenses the medicine furnished by his employer and does his work under whatever conditions his employer sees fit to impose. The principal is rightly expected to use his best efforts to see that the materials used are of proper character, purity and strength and his education must be such that he can perform that duty intelligently. No service of that kind is expected of the clerk. If the proprietor of the establishment is absent for a week or a month he still can and does control and direct affairs.

THE IMPORTANCE OF SHOP TRAINING.—The most important part of the training of a pharmacist is sufficient practical experience of the

right kind in a pharmacy of the right kind. There is not to my knowledge any respectable school of pharmacy in this country that does not unequivocally subscribe to that proposition. But no diploma of any school or college of pharmacy entitles its holder to practice pharmacy. It takes a license from the Board of Pharmacy to do that. It is not in any sense the duty of any educational institution to accept the responsibility for any drug-store training.

The Boards should thoroughly understand this question.

Twenty years ago there were only twelve schools of pharmacy in this country. All but one of them required drug-store experience. for graduation. Now only four of those twelve schools refuse to confer a pharmaceutical degree without that requirement. four are the Chicago College of Pharmacy; the Louisville College of Pharmacy; the National College of Pharmacy, of Washington City; and the Howard University School of Pharmacy, also of Washington.

Among the pharmacy schools which formerly required drug-store experience for graduation and which abolished that requirement in 1803 or after that year, we have: California College of Pharmacy. New York College of Pharmacy, Maryland College of Pharmacy, Brooklyn College of Pharmacy, the Universities Wisconsin, Kansas, Minnesota, Northwestern, Ohio, Vanderbilt and several other institutions.

New York is the only State in which any legally binding and fixed standards of efficiency are prescribed governing the recognition of pharmaceutical schools. Twenty-eight schools are registered in New York as complying with those standards. Only one of those twentyeight schools confers no degree without the drug-store experience requirement.

The American Conference of Pharmaceutical Faculties embraces twenty-six schools. Of these twenty-six the only ones that do not confer any pharmaceutical degree without the drug-store experience requirement for graduation are the Chicago College, the Louisville, the National, and Oklahoma University-four in all.

Among the colleges which confer at least one pharmaceutical degree without the drug-store experience while requiring it for at least one other degree we find: Philadelphia College of Pharmacy, Massachusetts College, St. Louis, Pittsburg, and others.

Not one school or college of pharmacy has ever refused admission

to any student without drug-store experience. No such school ever refused to allow a student to finish his course without drug-store experience. No college requiring drug-store experience for graduation has ever refused to confer its diploma upon any student who finished his college course first and had all his drug-store experience afterwards as soon as he could show that he had had it.

Several things are necessary to make a school of pharmacy efficient, but drug-store experience as a graduation requirement is evidently not one of them. It is entirely possible for the poorest school of pharmacy in existence to demand drug-store experience for graduation and for the best school not to require it. No man who knows enough about the pharmaceutical schools of our country to give his opinion any weight can deny that if the line be drawn between schools that base their diplomas in part upon drug-store training and schools that do not, several of our best schools will be found on either side of the line and several of the weakest as well. It is, therefore, evident that any pharmacy law which calls upon Boards to exempt from examination the graduates of schools retaining the drug-store experience requirement for graduation, and to deny that recognition to the graduates of all other schools, must be regarded as wholly obsolete, stupid, unjust, in many cases discriminating in favor of inferior schools and against better schools, and thereby defeating its own ends.

The pharmacy laws of Alabama, Arkansas, Delaware, Florida, Missouri, New Mexico and West Virginia are now the only laws which authorize the Boards to license without examination the graduates of any college of pharmacy prescribing three or four years' drug-store experience as a graduation requirement. But the Boards of Florida and New Mexico refuse to license any person without examination.

THE AMERICAN CONFERENCE OF PHARMACEUTICAL FACULTIES.

SYNOPSIS OF THE PROCEEDINGS, SEPTEMBER, 1906.

The seventh annual meeting was called to order by President Whelpley at 3.30 P.M., September 5, 1906.

The following institutions were represented:

Albany College of Pharmacy, Brooklyn College of Pharmacy, Chicago College of Pharmacy, Cleveland College of Pharmacy, University of Iowa, University of Kansas, Louisville College of Pharmacy, Maryland College of Pharmacy, University of Michigan, University of Minnesota, National College of Pharmacy, New York College of Pharmacy, Northwestern University School of Pharmacy, Ohio State University, Philadelphia College of Pharmacy, Pittsburg College of Pharmacy, Purdue University, Scio College of Pharmacy, St. Louis College of Pharmacy, Vanderbilt University, University of Washington, and University of Wisconsin.

President Whelpley read the annual address, which reviewed the history of this Conference and the previous efforts in this direction. The address was quite lengthy and contained a large amount of valuable material, ending with a number of recommendations, thirty-one in all. The address was referred to a committee consisting of J. H. Beal, Edward Kremers, and George B. Kauffman.

In the absence of the Secretary-Treasurer, J. O. Schlotterbeck, Chairman Puckner read the secretary-treasurer's report. The treasurer's report was referred to a committee composed of J. T. McGill, William J. Teeters, and W. C. Anderson.

The proposition to amend the by-laws, increasing the preliminary educational requirements, created considerable discussion. The proposed amendment read that the requirements for admission to a school or college shall be:

- (1) A minimum age of seventeen years except when a candidate is a graduate of an accredited high-school or of an institution of equal grade, in which case no age limit shall be demanded.
- (2) The satisfactory completion of at least one year of work in an accredited high-school or its equivalent shall be demanded.

Dr. Otto A. Wall submitted a mass of statistics and read a paper in opposition to the second section showing that it would be impossible for the St. Louis College of Pharmacy to conform with this requirement. The second section was finally amended by adding "Providing, however, that such requirements shall not apply to matriculants who are bona fide legal residents of Alabama, Arkansas, Indian Territory, Louisiana, Mississippi, Texas, Arizona, Colorado, Idaho, Nevada, New Mexico, Utah, Wyoming and Missouri."

On request of the New York State Colleges of Pharmacy, said colleges were given three years in which to comply with the require-

ments of the Conference regarding the number of hours of instruction given, the colleges agreeing to raise their requirements to 900 hours for the session of 1907–08, 1,000 hours for the session of 1908–09, and 1,100 hours, the Conference requirement, in 1909–10.

The committee to which was referred the President's address, reported favorably on most of the recommendations contained therein and the same were adopted. Among them was the recommendation to raise the annual dues to \$5.00 per year, another appointing three delegates to represent the Conference at the coming N.A.R.D. convention, and one providing for a Syllabus Committee to submit a syllabus of a course of instruction. The chairman of this syllabus committee was instructed to confer with the representative of each of the following named bodies: The Pharmacy Council, the Board of Pharmacy, and the Education Department of the State of New York and the National Association of Boards of Pharmacy, as to the practicability of outlining a minimum syllabus of study to prepare for the Board examinations.

There were a number of applications for admission to membership in the Conference, but, owing to insufficient information concerning most of the schools applying for membership, the matter was deferred and a ballot upon these applications will be taken by mail.

Action on the question of degrees was again deferred, W. T. McGill submitting the following:

Resolved, That the American Conference of Pharmaceutical Faculties recommends:

(I) A minimum preliminary educational requirement of secondary i. e., high-school work of four years for the degree of Doctor in Pharmacy, Phar. D.; two years for the degree of Pharmaceutical Chemist, Ph. C.; and one year for the degree of Graduate in Pharmacy, Ph. G.,

which was made a special order of business for the next meeting.

The Nominating Committee, consisting of George B. Kauffman, J. A. Koch, Charles Caspari, Jr., and Francis Hemm, presented a list of nominees for the ensuing year and the following officers were elected:

President, James H. Beal; Vice-President, J. T. McGill; Secretary-Treasurer, J. O. Schlotterbeck. Executive Committee: H. B. Hynson, F. J. Wulling, and W. A. Puckner, chairman.

RECOMMENDATIONS TO THE BOARDS OF PHARMACY.

Adopted by the American Pharmaceutical Association and by the Joint Conference of Boards and Schools of Pharmacy at Indianapolis, September, 1906.

- (1) All laws and regulations governing the licensing of pharmacists should make due distinction between apprentices, clerks and principals, and should establish definite minimum qualifications and indicate the rights and duties of each of these three classes of pharmaceutical workers.
- (2) No person should be licensed to practise as an assistant pharmacist who has not attained the age of twenty-one years.
- (3) The pharmaceutical training and experience required for the licensing of assistant pharmacists should together occupy not less than four years, all of which may consist of drug-store practice, or which may consist of three years' drug-store practice and one academic year's work in a pharmaceutical school, or of two years' drug-store practice and two academic years' work in a school of pharmacy.
- (4) No person should be licensed as a registered pharmacist and given the right to conduct a pharmacy who has not served at least two years as an assistant pharmacist, provided, however, that when any licensed assistant pharmacist attends upon the courses of instruction at a school of pharmacy subsequent to the date of his license as such, the time occupied by such school attendance may be deducted from that two years' service.
- (5) The pharmaceutical college training and drug-store experience required for the licensing of registered pharmacists should together occupy not less than five years, of which not less than three years should be drug-store experience, and graduation from an approved school of pharmacy should be required of all candidates for license as registered pharmacists.
- (6) All candidates for license to practice pharmacy should be required to pass such examinations as may in the opinion of the Board of Pharmacy be deemed necessary. Due credit should be given for successfully completed courses in approved pharmaceutical schools, but all candidates should be examined upon their ability to correctly read and dispense prescriptions.
- (7) A preliminary general education of not less than one year's satisfactorily completed high-school work, or its educational equiva-

lent, should be required as a prerequisite to the pharmaceutical experience or apprenticeship required for the licensing of registered pharmacists and assistant pharmacists and for admission to pharmaceutical schools.

- (8) In the determination of the fitness of any applicant to receive a license to practice pharmacy, all important facts of his educational history, practical experience and technical services should be taken into account, including his preliminary general education, his special education in pharmaceutical and other related technical schools, his practical experience in pharmacy and the results of the examinations he has passed and an average of these several factors, each assigned its appropriate value, should be adopted as the passing grade.
- (9) Definite and uniform conditions of efficiency should be adopted which all pharmaceutical schools must comply with in order to receive recognition by the Boards of Pharmacy in all cases where students and graduates receive credit in any form for the courses they have completed, or for the time of attendance at such schools, these conditions of efficiency to be made public and to be applied equally to all schools.

The conditions of efficiency prescribed for the recognition of schools of pharmacy should relate solely to matters affecting the character of their educational work.

- (10) Special education for the practice of pharmacy is in this age a necessity and should as rapidly as possible be made compulsory and the rules of the Boards of Pharmacy should be such as to promote and encourage it in all practicable ways. The special pharmaceutical education required should include substantial laboratory courses.
- (II) A syllabus of pharmacy examinations should be prepared, which shall indicate the subjects to be included in the Board examinations as well as in the courses of instruction in the pharmaceutical schools, with the view to the attainment of a reasonably uniform standard of minimum requirements which may be adopted by all boards and schools.
- (12) A national committee on examination questions should be appointed by the National Association of Boards of Pharmacy, which committee should include experienced specialists in the subjects mentioned in the syllabus of pharmacy examinations, who shall, under the direction of the said association, prepare questions suitable

for the examinations to be held by such State boards of pharmacy as may avail themselves of the services of said committee.

(13) We recommend to all concerned that the foregoing principles and standards be adhered to in any amendments to the pharmacy laws hereafter proposed in order that national uniformity may be ultimately attained. The minimum requirements indicated, and especially the preliminary general education, should be increased from time to time as circumstances permit. We further strongly urge that the boards of pharmacy employ the discretionary powers already theirs under existing laws to improve the educational status of the pharmacists of the future.

BOOK REVIEWS.

A TEXT-BOOK OF CHEMISTRY. By Prof. Samuel P. Sadtler and Prof. Virgil Coblentz. Fourth edition. Revised and rewritten. Philadelphia: J. B. Lippincott Company. 1906.

Sadtler and Coblentz's text-book of chemistry—revised and rewritten-has just been issued. Those who have used the previous editions with profit will find the same concise and masterly treatment in this volume which characterized the earlier editions. first part, treating of Elementary Physics, has been entirely rewritten and is in accord with the accepted views in regard to the nature of matter, and energy in its several forms of action. The chapters on electricity are particularly interesting and valuable, forming, as they do, a concise and up-to-date treatment of not only the modern principles underlying this study, but the most recent applications—particularly of electro-chemistry—in the manufacture of organic and inorganic compounds. The electrolytic methods for the preparation of the hypochlorites, ozone, carbides, iodoform, chloroform, chloral, saccharine and many technical products are given quite fully. A very valuable table on electro-chemical equivalents has also been included in the chapter on Electrolysis and its application.

The part on the chemistry of the non-metals and metals has also been in great part re-written. This also is full of interesting information on many subjects, such as the recently discovered atmospheric gases, the rare earths and metals, radioactive elements, the metallic carbides, etc. A number of tables have been added which will add greatly to the value of the book for reference by the analyst, as those on critical temperature and pressure, boiling point of water under various pressures, etc.

The chemistry of the organic compounds has been carefully revised and has been enlarged by the addition of a number of new synthetic compounds which are used in medicine and the arts. This part of the book has always been considered to be the most valuable from a didactic point of view. The treatment is clear-cut and the definitions are capable of comparison so that the student is never left in the dark as to the meaning of a name or the definition of a substance and how it differs from some closely related term or substance. Some changes have been made in the classifications, so that the whole consideration is from the point of view of the best authorities in organic chemistry. The care with which the revision of this part of the book has been carried on is best seen in the consideration of the alkaloids theobromine and caffeine, in the light of Fischer's recent work on uric acid; the incorporation of the recent work on isocyclic compounds and their derivatives; the chemistry of tissue-forming substances. This part of the book is remarkably free from the mistakes in botanical nomenclature which are so frequent in books on chemistry.

So long as this text-book by Sadtler and Coblentz is revised, as has been the fourth edition, it will continue to hold a very prominent place as a text-book for students in pharmacy and medicine and will be found a very valuable reference book by every one who requires to consult a work on chemistry.

The illustrations, printing, binding and whole appearance of the book are in keeping with the work of the authors on the contents, and both authors and publishers are to be congratulated on getting out such a satisfactory book. The book comprises 760 pages and can be had for \$3.50 in cloth binding and for \$4.00 in sheep binding.

PHILADELPHIA COLLEGE OF PHARMACY.

SEMI-ANNUAL MEETING.

September 24, 1906. The semi-annual meeting of the members of the Philadelphia College of Pharmacy was held this afternoon at 4 P.M. The President, Howard B. French, presiding. Twenty-three members were present. The minutes of the quarterly meeting, held June 25th, were read and approved. The minutes of the Board of Trustees for the meeting held June 5th were read by the Registrar and approved.

The Committee on Nominations presented their report, which was accepted. Dr. C. B. Lowe, for the delegates to the American Pharmaceutical Association, made an interesting verbal report of the recent meeting held at Indianapolis.

The following named gentlemen, previously reported, were elected to honorary membership: Fernand Ranwez, of Louvain, Belgium, and John Merle Coulter, Chicago, Ill.; and to corresponding membership: Pierre Élie Felix Perrédès, London, England; Frederick Alfred Upsher Smith, Chesterfield, England.

The President appointed the following named committee on membership: W. A. Rumsey, Chairman; Henry Kraemer, H. L. Stiles, James T. Shinn and C. A. Weidemann.

The election of trustees being next in order, Messrs. Rumsey and Moerk having been appointed tellers, a ballot was had, when Miers Busch, Aubrey H. Weightman and Wallace Procter were declared elected for the ensuing three years.

ABSTRACTS FROM THE MINUTES OF THE BOARD OF TRUSTEES.

The meeting was held June 5, 1906. Committee on Library reported a large number of accessions to the Library, many of them by donation.

The Committee on Accounts and Audit reported that they examined the accounts of the Treasurer, Registrar, and of the American Journal of Pharmacy and found them correct.

The Committee on Announcement reported that the contract for printing the Announcement for 1906 had been awarded, and that the announcement would be issued promptly.

Mr. French alluded to the death of Hon. Robert Adams, who was the speaker on the occasion of the last Commencement, and suggested that a note of his death be made on the minutes.

The Secretary was instructed to send a letter of thanks to Rev. David M. Steele and Rev. Dr. Edwin H. Delk for their services during commencement exercises.

Professor Remington referred to the Baccalaureate services as being a great feature of our Commencement and hoped for a continuance of these interesting occasions. Mr. Rumsey expressed much pleasure to know that members of the Alumni Association had taken an interest in the Commencement by being present on the stage. He favored issuing a card giving the events of Commencement week, and moved that a committee be appointed to do this. This met with approval and it was ordered that such a committee be appointed, Mr. Rumsey to act as chairman and to select his associates.

An appropriation of two hundred dollars was made to the Alumni Association.

Mr. French referred to the scholarship offered to graduates of the Philadelphia Public Schools, and suggested a notice be sent to the Superintendent of Public Schools regarding the several scholarships offered.

Four names were proposed for active membership, to be acted on at the next meeting of the Board of Trustees.

J. S. BEETEM, Sec. pro tem.

REPORT OF THE COMMITTEE ON NECROLOGY.

During the past year the college has lost by death eight members, one of these being a corresponding member.

Dr. Carl Schacht, who died in Berlin on November 6, 1905, was a corresponding member of the college for a number of years. He was one of the founders and the first president of the German Pharmaceutical Society and was well known for his work in connection with the revision of the German Pharmacopæia. He was a native of Berlin, having been born in that city in 1836. He was educated at various German universities and took his doctor's degree at the University of Berlin in 1862, the subject of his thesis being "Oleum Macedis." On the retirement of his father, in 1864, he became the

owner of the *Polnische Apotheke*, in which he had an interest until 1894, when he in turn handed the business over to his son. He was not only a practical druggist but was known for his original investigations on pharmaceutical subjects.

Dr. John Bley, who died on August 22, 1905, at Los Angeles, was a life member of the college, having joined in 1868.

Robert C. Brodie, who died on January 4, 1906, in this city, was eighty-one years of age at the time of his death. He was elected a member of the college in 1845, and had therefore been a member for sixty years, there having been few members who were connected with the college for a longer period than he. Mr. Brodie was in the drug business fifty-six years, retiring from business in 1903. For many years he was treasurer of the Philadelphia Wholesale Drug Company, and served St. Alban Lodge, No. 529, F. A. M., in the same capacity for twenty-five years. He was the father-in-law of our late Registrar, W. Nelson Stem.

Dr. Joseph P. Bolton died on February 24, 1906. He graduated from the college in 1860 and became a member in 1867. He was a graduate of Jefferson Medical College, in which institution at the time of his death he was demonstrator of chemistry, and also assistant neurologist at the Jefferson Hospital. He resided in Germantown, where he had conducted a drug store for a number of years.

Henry Cramer, of Germantown, who died on July 28, 1905, became a member of the college in 1866. He was of German birth and was not a graduate of the college. For a number of years he was a member of the firm of Cramer & Small, at 320 Race Street. He was much interested in the work of the college and sent a communication to the Procter Memorial meeting, held November 15, 1905, which was a beautiful tribute to Professor Procter.

Edward Tonkin Dobbins died at the University Hospital on February 17, 1906, as the result of a fall in the street near his home. Mr. Dobbins was born at Pemberton, N. J., May 29, 1841. He graduated from the college in 1862, became a member of the American Pharmaceutical Association in 1867, and of the college in 1898, being elected a member of the Board of Trustees in the succeeding year. His will provided for the establishment of a scholarship in the Philadelphia College of Pharmacy to be known by his name. Mr. Dobbins first started in the drug business as an apprentice with

William B. Webb, corner of Tenth and Spring Garden Streets, and entered the employ of John Wyeth the year of his graduation, first in the retail department; later he entered the manufacturing department. He then became a member of the firm and was for a number of years second vice-president of the firm, but for some years past had not been active in its management. He was one of the early members of the Union League, Philadelphia; was a member of the Colonial Society of Pennsylvania, the Sons of the Revolution, and of the Country Club. He was interred at St. Andrew's Churchyard, Mt. Holly, N. J., near the chapel there, which was erected by his family as a memorial chapel some years ago, in 1879. Mr. Dobbins was a man of great integrity, always ready to help those in need, and his kindly assistance will be missed by many.

Louis Koch died on February 24, 1906. He joined the college and the American Pharmaceutical Association in 1872, and though not a graduate of pharmacy, took considerable interest in the development of the professional side of pharmacy.

Allen Shryock died on November 14, 1905. Mr. Shryock graduated from the college in 1860 and became a member in 1870. Mr. Shryock was in the drug business for a number of years. He was a teacher of music at the time of his death.

THE PHILADELPHIA BRANCH OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION.

There are probably but few present-day activities that promise to have a more far-reaching influence on the rise and the development of the science of pharmacy, in the United States, than the organization and support of the Council on Pharmacy and Chemistry by the American Medical Association.

The work that has been undertaken by this Council, while thoroughly well appreciated by the leading medical practitioners of this country, does not appear to be so well known to, or at least is not so thoroughly well understood by, the average retail pharmacist. This evident lack of appreciation and interest on the part of the pharmacist is all the more unfortunate in that no class of persons will or can derive the same amount of material or moral benefit from a proper appreciation and support of the work undertaken by this Council.

For many years pharmacists have complained that their prescription work is decreasing in amount and in profit, and that physicians are either dispensing their own medicines or are confining themselves more and more to prescribing ready-made proprietary preparations, the dispensing of which left little or no profit to the pharmacist.

Despite the marked changes that have been brought about in the practice of pharmacy itself, comparatively few of its votaries have been impressed by the fact that the reduction in the number of prescriptions, the increase in the use of proprietary medicines, and the corresponding decrease in the profitableness of the prescriptions dispensed are all due largely, if not entirely, to their own lack of interest in the more professional side of their vocation, and to the accompanying lack of practical knowledge of the needs and the wants of medical men.

To give retail pharmacists an opportunity of becoming more thoroughly acquainted with the objects, needs, wants and accomplishments of the Council on Pharmacy and Chemistry of the American Medical Association, it is proposed to devote the November meeting of the Philadelphia Branch of the American Pharmaceutical Association to the discussion of various phases of:—

The Work of the Council on Pharmacy and Chemistry of the American Medical Association.

The November meeting of the Philadelphia Branch will be held in the lower hall of the College of Physicians, northeast corner of Thirteenth and Locust Streets, on the evening of Tuesday, November 6, 1906, and the discussion will be opened by the following communications:—

Prof. S. P. Sadtler: The Work of the Council on Pharmacy and Chemistry of the American Medical Association.

Dr. Alfred Stengel: The Endorsement of the Work of the Council by Medical Practitioners.

Prof. Charles H. LaWall: The Effect of Publicity on the Standing and the Use of Nostrums.

Prof. W. A. Puckner: The Needs of the Council on Pharmacy and Chemistry of the American Medical Association.